

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

1. Amendments and Support for Same

By the Response, claim 1 has been amended to incorporate all of the features of claim 2. Claim 2 has been cancelled, and claims 3 and 4 have been amended to change their dependency to claim 1. Claim 5 was cancelled in the preliminary Amendment filed June 5, 2006. New claims 6-10 have been added to further complete the scope of protection to which Applicant is entitled. Claim 6 parallels claim 4. Support for claims 7-10 can be found in, e.g., Figs. 1, 7, and 8. No new matter has been added. Accordingly, claims 1, 3-4, and 6-10 are respectfully submitted for consideration. Approval and entry of the amendments are respectfully requested.

2. Objection to the Drawings

With respect to the objection to the drawings, Applicant submits herewith a Replacement Sheet with all the typographical errors in Fig. 7 corrected without adding new matter. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection to the drawings.

3. Objection to the Specification

With respect to the objection to the specification, Applicant has corrected all informalities as suggested by the Examiner in a substitute specification, no new matter has been added. Reference to Fig. 13 was a typographical error, which has been corrected as referring to Fig. 3. In view of the amendments to the specification, Applicant respectfully requests reconsideration and withdrawal of the objection to the specification.

4. Objections to the Claims

With respect to the objection to claims 1 and 4, Applicant has corrected all informalities noted by the Examiner. In view of the amendments set forth above, Applicant respectfully requests reconsideration and withdrawal of the objection to claims 1 and 4.

5. Claim rejections under 35 U.S.C. §112, 2nd paragraph

With respect to the rejection of claims 1-4 under 35 U.S.C. §112, 2nd paragraph, Applicant has amended claim 1 to correct all informalities noted by the Examiner. In view of the amendments and arguments set forth above, Applicant respectfully requests reconsideration and withdrawal of the §112, 2nd paragraph, rejections of claims 1-4.

6. Rejections under 35 U.S.C. §103(a)

With respect to the rejection of claims 1-4 under 35 U.S.C. §103(a) as being unpatentable over Rogers (US 5,738,481) in view of Palmero (US 6,531,798), and to the rejection of claim 3 under 35 U.S.C. §103(a) as being unpatentable over Rogers and Palmero in further view of Shimada (JP 2003-343679), Applicant respectfully traverses the rejection at least for the reason that Rogers, Palmero, and Shimada, combined or separately, fail to teach, disclose, or suggest all of the limitation recited in the rejected claims.

As amended, claim 1 further clarifies that the base-side part and the tip-side part of the second arm component are hollow, and the moving device is contained in one of the hollow base-side part and the tip-side part, while the threaded member is contained in the other.

In the Office Action, the Examiner contends that Palmero disclose a hollow “base-side part 10” and a hollow “tip-side part 70.” However, Fig. 1 of Palmero and its description in the specification clearly shows element 10 as a linear/rotary motor, and element 70 is a shaft. Clearly, linear/rotary motor 10 and shaft 70 of Palmero are two distinctly different components and are completely different from Applicant’s second arm component (e.g., arm component 12 in Fig. 1), which is divided into two

parts, a hollow tip-side part (e.g., element 21) and a hollow base-side part (e.g., element 20).

According to Applicant's claimed invention, the moving device (e.g., element 31) of the rotation means (e.g., arm rotator 22) is incorporated in one of the base-side part and the tip-side part of the second arm component, while the threaded member is incorporated in the other. Hence, the claimed industrial robot can accommodate the moving device and the threaded member efficiently by utilizing the inside space (hollow) of the second arm component and, thus, achieving a compact structure of a robotic arm. As a result, the robot arm with compactness and high flexibility in movement can be conveniently moved into a narrow working space.

With respect to Rogers and Shimada, similar to Palmero, the cited prior art references also fail to teach, disclose, or suggest the base-side part and the tip-side part of the second arm component are hollow, and the moving device is contained in one of the hollow base-side part and the tip-side part, while the threaded member is contained in the other, as recited in amended claim 1.

In view of the amendment and arguments set forth above, Applicant respectfully requests reconsideration and withdrawal of the §103(a) rejection of claims 1-4.

7. Conclusion

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1, 3-4, and 6-10 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's representative, the Examiner is invited to contact the undersigned at the numbers shown.

Further, while no fees are believed to be due, the Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-4525.

Respectfully submitted,

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